

REMARKS

Upon entry of the foregoing Amendment, claims 1-2, 4, and 7-12 are pending in the application. Claims 1-2 and 7 have been amended. Claims 3 and 5-6 are cancelled and claims 7-12 are newly added. Applicant believes that this Amendment does not add new matter. In view of the foregoing Amendment and following Remarks, allowance of all the pending claims is requested.

ALLOWABLE SUBJECT MATTER

Applicant thanks The Examiner for indicating that previously pending claims 5-6 would be allowable if rewritten in independent form. Applicant has rewritten claims 5-6 in independent form by incorporating the features included therein into new independent claim 8. Further, Applicant has amended independent claim 1 to include similar features as previously recited in claims 5-6. As such, independent claims 1 and 8 now recite subject matter indicated as being allowable, and notice to that effect is respectfully requested.

REJECTION UNDER 35 U.S.C. § 101

The Examiner has rejected claims 1-2, 4, and 7 under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter. Applicant disagrees with the propriety of this rejection because the claims produce a “useful, concrete, and tangible result,” and are thus directed toward statutory subject matter.

Specifically, claims 1 and 8 recite various steps for determining a “cavity radius for both increasing and decreasing gas velocity.” Such features provide a useful, concrete, and tangible result for at least the reason that the cavity radius may be used to determine “the cavity size in packed bed systems.”

However, although Applicant disagrees with the propriety of the rejection, solely in an effort to expedite prosecution, Applicant has amended the claims to further clarify the “useful, concrete, and tangible result.” Specifically, the Examiner has indicated that the claims would recite a tangible result if amended to recite “storing the result.” Office Action at 3.

Accordingly, claims 1 and 8 have been amended to recite “storing the determined cavity size in a memory,” and as such, Applicant requests that the Examiner withdraw this rejection of the claims.

REJECTION UNDER 35 U.S.C. § 112

The Examiner has rejected claims 1-2, 4, and 7 under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant disagrees with the propriety of this rejection because the claims are clear and definite, and do point out and distinctly claim the subject matter which Applicant regards as the invention.

However, solely for purposes of expediting prosecution of this application, Applicant has amended the claims to further clarify the invention. Accordingly, Applicant requests that the Examiner withdraw this rejection of the claims.

REJECTIONS UNDER 35 U.S.C. §§ 102/103

The Examiner has rejected claims 1-2, 4, and 7 under 35 U.S.C. § 102(a) as allegedly being anticipated by, or alternatively under 35 U.S.C. § 103 as allegedly being obvious over “Particle-scale modelling of gas-solid flow in fluidisation” to Yu et al. (“Yu”). Further, the Examiner has rejected claims 1-2, 4, and 7 under § 102(b) as allegedly being anticipated by, or alternatively under § 103 as allegedly being obvious over “Numerical simulation of the gas-solid flow in a bed with lateral gas blasting” to Xu et al. (“Xu”).

Although Applicant disagrees with the propriety of these rejections, solely in an effort to expedite prosecution, independent claim 1 has been amended to recited features previously indicated by the Examiner as being allowable subject matter. Further, new independent claim 8 recites similar features previously indicated by the Examiner as being allowable subject matter. Dependent claims 2, 4, 7, and 9-12 depend from and add features to one of claims 1 and 8, and are therefore allowable for at least the reason that they depend from allowable

independent claims. As such, Applicant requests the Examiner withdraw these rejections of the claims.

CONCLUSION

Having addressed each of the foregoing rejections, it is respectfully submitted that a full and complete response has been made to the outstanding Office Action and, as such, the application is in condition for allowance. Notice to that effect is respectfully requested.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Date: November 28, 2006

Respectfully submitted,

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